

APPLICANT(S): GEVA, Jacob
SERIAL NO.: 10/086,633
FILED: March 4, 2002
Page 3

AMENDMENTS TO THE CLAIMS

Please add or amend the claims to read as follows, and cancel without prejudice or disclaimer to resubmission in a divisional or continuation application claims indicated as cancelled:

CLAIMS

I claim:

1. (currently amended) An ambulatory patient monitoring apparatus comprising:
a portable housing comprising:
at least one physiological data input device operative to gather physiological data of a patient;
location determination circuitry;
communications circuitry capable of communicating through a cellular network and a data network and capable of communicating wirelessly to a central health monitoring station;
signal processing circuitry for processing signals associated with any of said physiological data input device, said location determination circuitry and said communications circuitry; and
control circuitry operative to simultaneously store a first portion of said physiological data in a memory in FIFO fashion and a second portion of said physiological data in said memory that is write-protected with respect to said first portion.
2. (original) Apparatus according to claim 1 wherein said at least one physiological data input device is assembled within said housing.
3. (original) Apparatus according to claim 1 wherein said at least one physiological data input device is at least partially external to said housing.
4. (original) Apparatus according to claim 3 wherein said external portion of said at least one physiological data input device is connected to said housing via a connector.

APPLICANT(S): GEVA, Jacob
SERIAL NO.: 10/086,633
FILED: March 4, 2002
Page 4

5. (currently amended) Apparatus according to claim 1 wherein said at least one physiological data input device ~~[[communicate]]~~ communicates with said communications circuitry through wires.

6. (currently amended) Apparatus according to claim 1 wherein said at least one physiological data input device ~~[[communicate]]~~ communicates with said communications circuitry wirelessly.

7. (currently amended) Apparatus according to claim 6 wherein said wireless communication with said communication circuitry is achieved by a radio frequency transmitter.

8. (currently amended) Apparatus according to claim 6 wherein said wireless communication with said communication circuitry is achieved by an optical transmitter.

9. (original) Apparatus according to claim 1 wherein said location determination circuitry comprises GPS circuitry.

10. (original) Apparatus according to claim 1 wherein said control circuitry operates said physiological data input device continuously.

11. (original) Apparatus according to claim 1 wherein said control circuitry operates said physiological data input device upon initiation by said patient.

12. (original) Apparatus according to claim 1 wherein said control circuitry operates said physiological data input device upon initiation through said data network.

13. (original) Apparatus according to claim 1 and additionally comprising voice communication circuitry.

APPLICANT(S): GEVA, Jacob
SERIAL NO.: 10/086,633
FILED: March 4, 2002
Page 5

14. (original) Apparatus according to claim 1 wherein said control circuitry comprises a memory for storing any of said physiological data.

15. (cancelled) Apparatus according to claim 8 wherein said control circuitry is operative to simultaneously store a first portion of said physiological data in said memory in FIFO fashion and a second portion of said physiological data in said memory that is write-protected with respect to said first portion.

16. (original) Apparatus according to claim 8 wherein said memory comprises preset parameters adapted for comparison with said physiological data.

17. (original) Apparatus according to claim 10 wherein said control circuitry is operative to determine whether said physiological data are within said preset parameters.

18. (original) Apparatus according to claim 11 wherein said control circuitry is operative to initiate contact with said central health monitoring station when said physiological data are determined to be outside of said preset parameters.

19. (original) Apparatus according to claim 8 wherein said memory comprises preprogrammed instructions for output to said patient via either of a display and a speaker.

20. (currently amended) An apparatus for monitoring a patient, the apparatus comprising:

a portable housing for use by said patient, the portable housing comprising:

at least one physiological data input device operative to gather physiological data of said patient;

location determination circuitry;

communications circuitry for communicating through a data network and a cellular network for communicating wirelessly to a central health monitoring station;

APPLICANT(S): GEVA, Jacob
SERIAL NO.: 10/086,633
FILED: March 4, 2002
Page 6

digital signal processing circuitry for processing signals associated with any of said physiological data input device, said location determination circuitry and said communications circuitry; and

control circuitry operative to simultaneously store a first portion of said physiological data in a memory in FIFO fashion and a second portion of said physiological data in said memory that is write-protected with respect to said first portion.

21. (currently amended) A method for monitoring a patient, the method comprising:
providing a portable housing for use by said patient, the portable housing comprising:

at least one physiological data input device operative to gather physiological data of said patient;

location determination circuitry;

communications circuitry for communicating information through a ~~cellular network and data network~~ and for communicating wirelessly to a central health monitoring station; and

control circuitry operative to simultaneously store a first portion of said physiological data in a memory in FIFO fashion and a second portion of said physiological data in said memory that is write-protected with respect to said first portion;

gathering physiological data of said patient;

determining the geographic location of said patient; and

communicating said physiological data and said geographic location through a data network to said central health monitoring station.

22. (original) A method according to claim 21 and further comprising:
analyzing said physiological data; and
providing a response based on said physiological data.

23. (original) A method according to claim 21 wherein said gathering step is performed in response to activation by said patient.

APPLICANT(S): GEVA, Jacob
SERIAL NO.: 10/086,633
FILED: March 4, 2002
Page 7

24. (original) A method according to claim 21 and further comprising activating an alarm prior to said activation by said patient.

25. (original) A method according to claim 21 wherein said gathering step is performed independently from activation by said patient.

26. (original) A method according to claim 21 wherein said gathering step comprises storing said physiological data in a memory.

27. (original) A method according to claim 21 wherein said communicating step is performed in response to activation by said patient.

28. (original) A method according to claim 27 wherein said communicating step is performed independently from activation by said patient upon said memory becoming full.

29. (original) A method according to claim 28 and further comprising clearing a portion of said memory corresponding to said physiological data that has been communicated to said central health monitoring station.

30. (cancelled) A method according to claim 26 wherein said storing step comprises simultaneously storing a first portion of said physiological data in said memory in FIFO fashion and a second portion of said physiological data in said memory that is write-protected with respect to said first portion.

31. (original) A method according to claim 21 wherein said communicating step comprises establishing a communications link with said central health monitoring station in response to activation by said patient.

32. (original) A method according to claim 21 wherein said communicating step comprises establishing a communications link with said central health monitoring station in response to an incoming communication from said central health monitoring station.

APPLICANT(S): GEVA, Jacob
SERIAL NO.: 10/086,633
FILED: March 4, 2002
Page 8

33. (original) A method according to claim 21 wherein said communicating step comprises:

determining whether said physiological data are outside of preset parameters;

and

establishing a communications link with said central health monitoring station when said physiological data are determined to be outside of said preset parameters.

34. (original) A method according to claim 22 wherein said providing a response step comprises voice-communicating an instruction to said patient.

35. (original) A method according to claim 22 wherein said providing a response step comprises providing said patient's location to medical emergency personnel and dispatching said personnel to said patient's location.

36. (currently amended) An ambulatory patient monitoring apparatus comprising:
a housing comprising:
physiological data input means gathering for physiological data of a patient;

location determination means for determining a patient location;

communications means for communicating through a ~~cellular network~~
~~and data network~~ and for communicating wirelessly to a central health monitoring station;
and

control means for controlling the monitoring apparatus operative to simultaneously store a first portion of said physiological data in a memory in FIFO fashion and a second portion of said physiological data in said memory that is write-protected with respect to said first portion.

37. (currently amended) An ambulatory patient monitoring apparatus comprising:
a housing comprising:

APPLICANT(S): GEVA, Jacob
SERIAL NO.: 10/086,633
FILED: March 4, 2002
Page 9

at least one physiological data input device operative to gather physiological data of a patient;

location determination circuitry;

communications circuitry capable of communicating through a ~~cellular network and~~ data network and for communicating wirelessly to a central health monitoring station;

signal processing circuitry for processing signals associated with any of said physiological data input device, said location determination circuitry and said communications circuitry; and

control circuitry operative to initiate physiological data gathering upon receiving a signal through said data network and operative to simultaneously store a first portion of said physiological data in a memory in FIFO fashion and a second portion of said physiological data in said memory that is write-protected with respect to said first portion.

38. (currently amended) A patient monitoring apparatus comprising:

a portable housing comprising:

a physiological data input device capable of gathering physiological data of a patient;

location determination circuitry;

communications circuitry capable of communicating through a ~~cellular network and~~ data network and of communicating wirelessly to a central station;

control circuitry operative to simultaneously store a first portion of said physiological data in a memory in FIFO fashion and a second portion of said physiological data in said memory that is write-protected with respect to said first portion; and

audio communication circuitry.

39. (currently amended) A method for monitoring a patient, the method comprising:

providing a housing for use by said patient, the housing comprising:

a physiological data input device operative to gather physiological data of said patient;

location determination circuitry;

APPLICANT(S): GEVA, Jacob
SERIAL NO.: 10/086,633
FILED: March 4, 2002
Page 10

communications circuitry for communicating information through a ~~cellular network and data network~~ and for communicating wirelessly to a central health monitoring station and for communicating voice data; and

control circuitry operative to simultaneously store a first portion of said physiological data in a memory in FIFO fashion and a second portion of said physiological data in said memory that is write-protected with respect to said first portion;

gathering physiological data of said patient;

determining the geographic location of said patient; and

communicating said physiological data through a data network to said central health monitoring station.

40. (currently amended) A method for monitoring a patient, the method comprising:

providing a portable housing for use by said patient, the portable housing comprising:

at least one physiological data input device operative to gather physiological data of said patient;

location determination circuitry;

communications circuitry for communicating information through a ~~cellular network and data network~~ and for communicating wirelessly to a central health monitoring station; and

control circuitry operative to simultaneously store a first portion of said physiological data in a memory in FIFO fashion and a second portion of said physiological data in said memory that is write-protected with respect to said first portion; and ;

in response to a signal received from the data network, gathering physiological data of said ~~[[patient;]]~~ patient, communicating said physiological data through the data network to said central health monitoring station.

41. (new) The apparatus according to claim 1, wherein said communication circuitry capable of communicating wirelessly is capable of communicating over a cellular telephone network.

APPLICANT(S): GEVA, Jacob
SERIAL NO.: 10/086,633
FILED: March 4, 2002
Page 11

42. (new) The apparatus according to claim 41, wherein said cellular telephone network is selected from the group consisting of a CDMA network and a GSM network.

43. (new) The apparatus according to claim 20, wherein said communication circuitry for communicating wirelessly is for communicating over a cellular telephone network.

44. (new) The apparatus according to claim 43, wherein said cellular telephone network is selected from the group consisting of a CDMA network and a GSM network.

45. (new) The apparatus according to claim 1, wherein said at least one physiological data input device is a blood oxygen saturation monitor.

46. (new) The apparatus according to claim 1, wherein said at least one physiological data input device is a respiration monitor.

47. (new) The apparatus according to claim 1, wherein said at least one physiological data input device is an EEG monitor.

48. (new) The apparatus according to claim 1, wherein said at least one physiological data input device is a blood pressure monitor.

49. (new) The apparatus according to claim 1, wherein said at least one physiological data input device is a blood glucose monitor.

50. (new) The apparatus according to claim 1, wherein said at least one physiological data input device is a lung function monitor.

51. (new) The apparatus according to claim 1, wherein said at least one physiological data input device is a SpO2 saturation monitor.

APPLICANT(S): GEVA, Jacob
SERIAL NO.: 10/086,633
FILED: March 4, 2002
Page 12

52. (new) The apparatus according to claim 1, wherein said at least one physiological data input device is a temperature monitor.

53. (new) The apparatus according to claim 1, wherein said at least one physiological data input device is an ECG monitor.

54. (new) The apparatus according to claim 1, wherein said physiological data input device communicates wirelessly with said signal processing circuitry.

55. (new) The apparatus according to claim 1, wherein said physiological data input device communicates with said signal processing circuitry through an MMC.

56. (new) The apparatus according to claim 1, wherein said communications circuitry capable of communicating through a data network is capable of communicating through a WAN.

57. (new) The apparatus according to claim 1, wherein said communications circuitry capable of communicating through a data network is capable of communicating through a cable TV network.

58. (new) The method as in claim 21, including reminding a patient to monitor physiological data.

59. (new) The method as in claim 21, wherein said communicating said physiological data through a data network to said central health monitoring station, comprises downloading said physiological data onto a server connected to said data network.

60. (new) The method as in claim 59, comprising receiving at said central health station said physiological data stored on said server.

APPLICANT(S): GEVA, Jacob
SERIAL NO.: 10/086,633
FILED: March 4, 2002
Page 13

61. (new) A method as in claim 21, wherein said communications circuitry for communicating wirelessly is for communicating over a cellular telephone network.

62. (new) A method as in claim 36, wherein said communications means for communicating wirelessly is for communicating over a cellular telephone network.

63. (new) A method as in claim 37, wherein said communications means for communicating wirelessly is for communicating over a cellular telephone network.

64. (new) A method as in claim 38, wherein said communications circuitry capable of communicating wirelessly is capable of communicating over a cellular telephone network.

65. (new) A method as in claim 39, wherein said communications circuitry for communicating wirelessly is for communicating over a cellular telephone network.

66. (new) A method as in claim 40, wherein said communications circuitry for communicating wirelessly is for communicating over a cellular telephone network.